

### **REMARKS**

The Office Action dated December 24, 2009, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-24 are currently pending in the application, of which claims 1, 13, and 19 are independent claims. Claim 25 was previously cancelled without prejudice or disclaimer.

In view of the following remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections to the claims for the reasons discussed below.

#### ***Claim Rejections under 35 U.S.C. §102(e)***

The Office Action rejected claims 1-24 under 35 U.S.C. §102(e) as allegedly anticipated by Patel (U.S. Patent No. 6,850,764) (“Patel”). The Office alleged that Patel discloses or suggests every claim feature recited in claims 1-24. Applicants respectfully submit that the claims recite subject matter that is neither described nor suggested in Patel.

Claim 1, upon which claims 2-12 depend, recites a method for determining behavior patterns of users of a telecommunication system based on information collected from the telecommunication system. The method includes defining at least one variable or a combination of variables of the telecommunication system, and filtering user-specific information corresponding to the defined at least one variable or the combination of variables from the information collected from the telecommunication system. The

method also includes classifying the users of the telecommunication system based on the filtered user-specific information into various classes indicative of a user's behavior patterns during use of the telecommunication system.

Claim, 13, upon which claims 14-18 depend, recites a system for determining users' patterns of behavior in a telecommunication system. The system includes defining means for defining at least one variable or a combination of variables of the telecommunication system, and filtering means for filtering user-specific information corresponding to the at least one variable or the combination of variables from the user-specific information received in real time from the telecommunication system. The system also includes classifying means for classifying users of the telecommunication system based on said filtered user-specific information into various classes indicative of a user's behavior patterns during use of the telecommunication system. The system also includes analysis means for statistically analyzing the classification of the behavior patterns of users received from the classifying means and further for defining previously presented classes of behavior patterns.

Claim, 19, upon which claims 20-24 depend, recites a system for determining behavior patterns of users of a telecommunication system based on information collected from the telecommunication system. The system includes at least one base station, at least one mobile services switching center configured to establish a connection to a mobile station and further configured to generate connection information, and at least one network management system configured to monitor and manage an operation of the

telecommunication system. The system also includes a customer register configured to receive the connection information from the at least one mobile services switching center, a statistical unit configured to receive statistical information from the at least one network management system, and a filter configured to filter said user-specific information corresponding to at least one variable or a combination of variables from the user-specific information received in real time from the telecommunication system, wherein said at least one variable or the combination of variables are defined in the telecommunication system. The system also includes a classifier configured to classify users of the telecommunication system based on said filtered user-specific information into various classes indicative of a user's behavior patterns during use of the telecommunication system.

As will be discussed below, Patel fails to describe or suggest every feature recited in claims 1-24, and therefore fails to provide the features discussed above.

Patel is directed to a method and a system for allocating bandwidth on a wireless communication network based on a geo-location tool and an allocation engine. The allocations are performed based on bandwidth estimations determined for the different geo-location areas. Bandwidth estimations are determined based on requested service types by the mobile users, the location of the mobile users and historical network usage data collected from the network and the users (Patel, col. 1, line 66, to col. 4, line 13).

Patel fails to describe or suggest each and every element recited in claims 1, 13, and 19. In particular, Patel fails to describe or suggest, at least,

filtering user-specific information corresponding to the defined at least one variable or the combination of variables from the information collected from the telecommunication system; and

classifying the users of the telecommunication system based on the filtered user-specific information into various classes indicative of a user's behavior patterns during use of the telecommunication system,

as recited in claim 1.

The Office Action referred to a quality of service (QoS) filter 204 described in column 12, line 56, to column 13, line 5 of Patel to allege that Patel describes the “filtering” step recited in claim 1. A review of these passages of Patel in relation to the entirety of Patel clearly demonstrates that Patel fails to described the aforementioned features recited in claim 1.

At column 12, line 56, to column 13, line 5, Patel describes a QoS filter that filters *user connection data* (e.g., user traffic). One of ordinary skill in the relevant art would have understood that *user connection data* is not “user-specific information corresponding to the defined at least one variable or the combination of variables from the information collected from the telecommunication system.” as recited in claim 1 (emphasis added). One would understand that *user connection data* is not collected from the telecommunication system.

Furthermore, Patel fails to describe or suggest that the filter constraints and control parameters for the QoS filter are “user specific.” Patel, at column 12, lines 60-61, describes that the QoS filter constraints and control parameters may be location specific and time specific. Accordingly, Patel clearly fails to describe or suggest the step of

“filtering user-specific information corresponding to the defined at least one variable or the combination of variables from the information collected from the telecommunication system,” as recited in claim 1.

Further, the Office Action referred to various passages in Patel to allege that Patel describes the “classifying” step recited in claim 1. A review of these passages of Patel in relation to the entirety of Patel clearly demonstrates that Patel fails to described the aforementioned features recited in claim 1.

Patel, at column 7, line 62, to column 8, line 5, describes a “flow classifier” that classifies packets into various classes or service types. Assuming *arguendo* that one of ordinary skill in the relevant art were to assume that all incoming packets are originated from the same user (which is not described or suggested in Patel and which is not normally within the knowledge of one of ordinary skill in the relevant art), these passages of Patel fail to describe or suggest, at least, “classifying the users of the telecommunication system,” as recited in claim 1. Hence, incoming packets are classified, not users of the telecommunication system.

Patel, at column 3, lines 39-65, describes how to estimate geo-location-specific bandwidth needs. Estimations are determined based on usage, for example, based on subscriber usage profiles (*see* Patel, col. 3, lines 49-51). However, even if subscriber usage profiles are described by Patel, the cited passages of Patel clearly fail to describe or suggest the step of “classifying users of the telecommunication system,” as recited in

claim 1. The subscriber usage profiles are used to estimate the bandwidth needs in geo-location-specific areas, not to classify users.

Patel, at column 12, line 56, to column 14, line 5, describes the classification of traffic into different traffic types and services, for example, business email service, business internet access, etc., and the constraint of those traffic types/services based on the performance of the QoS filter.

None of these passages in Patel, therefore, describe or suggest, at least, “classifying the users of the telecommunication system based on the filtered user-specific information into various classes indicative of a user’s behavior patterns during use of the telecommunication system,” as recited in claim 1. Therefore, contrary to the Office Action’s allegations, Patel fails to describe each and every element recited in claim 1.

Claims 2-12 depend from claim 1. Claims 14-18 depend from claim 13. Claims 20-24 depend from claim 19. Accordingly, claims 2-12, 14-18, and 20-24 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicants respectfully request withdrawal of the rejections of claims 1-24 under 35 U.S.C. §102(e), and respectfully submit that claims 1, 13, and 19, and the claims that depend therefrom, are in condition for allowance.

### **CONCLUSION**

In conclusion, Applicants respectfully submit that Patel fails to describe or suggest each and every feature recited in claims 1-24. The distinctions previously noted are more than sufficient to render the claimed invention unanticipated. It is therefore respectfully requested that all of claims 1-24 be allowed, and this present application be passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

/Brad Y. Chin/  
Brad Y. Chin, Attorney for Applicants  
Registration No. 52,738

**Customer No. 32294**  
SQUIRE, SANDERS & DEMPSEY LLP  
14<sup>TH</sup> Floor  
8000 Towers Crescent Drive  
Vienna, Virginia 22182-6212  
Telephone: 703-720-7800  
Fax: 703-720-7802  
BYC:dlh